

WHAT IS CLAIMED IS:

1. An apparatus for making a blow-molded article, comprising:  
a mold defining a cavity therein, the cavity having a side wall inner surface encircling a central longitudinal axis of the mold, a circumferentially extending groove  
5 being defined in the side wall inner surface of the mold for receiving flowable thermoplastic material during a blow cycle so as to form a solid flange extending radially outwardly from a side wall of a blow-molded article; and  
a heating system disposed locally adjacent the groove and operable to heat a local region of the mold adjacent the groove to a higher temperature than other portions of the  
10 mold outside said region such that the thermoplastic material received in the groove is heated and thereby rendered less viscous.
2. The apparatus of claim 1, further comprising a cooling system disposed locally adjacent the groove and operable to cool a local region of the mold adjacent the groove such that the flange formed in the groove is cooled.
- 15 3. A method for making a blow-molded article, comprising the steps of:  
providing a flowable thermoplastic member in a generally tubular configuration closed at one end;  
enclosing the flowable thermoplastic member in a cavity of a mold, the mold having a side wall inner surface encircling a central longitudinal axis of the mold and  
20 having a base wall inner surface adjacent the closed end of the flowable thermoplastic member;  
providing a circumferentially extending groove in the side wall inner surface of the mold at a location spaced longitudinally from the base wall inner surface;  
inflating the flowable thermoplastic member to cause flowable thermoplastic  
25 material to expand against and conform to the side wall and base wall inner surfaces of the mold to form an article comprising a base wall and a tubular side wall; and  
heating a region of the mold adjacent the groove to a higher temperature than other portions of the mold outside said region so as to heat the flowable thermoplastic material that is blown into the groove such that the groove is substantially entirely filled

by the thermoplastic material so as to form a solid flange extending radially outwardly from the side wall of the article.

4. The method of claim 3, wherein the mold comprises two mold halves movable between a closed position in which the mold halves mate to form the cavity and an open  
5 position in which the mold halves are separated from each other to allow the article to be ejected from the mold, the enclosing step comprising moving the mold halves to the closed position to enclose the flowable thermoplastic member in the cavity of the mold.

5. The method of claim 4, further comprising the step of moving the mold halves to the open position following the inflating step.

10 6. The method of claim 5, wherein the step of heating the region of the mold adjacent the groove is begun prior to the enclosing step and is terminated after the inflating step is completed.

7. The method of claim 3, further comprising terminating the heating step and then cooling the region of the mold adjacent the groove by operating a cooling system  
15 disposed locally in the mold adjacent said region.

8. The method of claim 7, wherein the heating step comprises operating a heating system disposed locally in the mold adjacent said region.

9. The method of claim 8, wherein the mold comprises two mold halves movable between a closed position in which the mold halves mate to form the cavity and an open  
20 position in which the mold halves are separated from each other to allow the article to be ejected from the mold, the enclosing step comprising moving the mold halves to the closed position to enclose the flowable thermoplastic member in the cavity of the mold.

10. The method of claim 9, further comprising the step of moving the mold halves to the open position following the inflating step.

25 11. The method of claim 10, wherein the step of operating the heating system is begun prior to the enclosing step and is terminated after the inflating step is completed.

12. The method of claim 11, wherein the step of operating the cooling system is performed prior to the step of moving the mold halves to the open position.